

PME RESEARCH LABORATORY, MAY 1980

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TRIACETIN ANALYSIS BY (GC)²

With regard to the increasing number of triacetin analyses requested (1) and to meet the requirements to analyze impurities and chemically modified "triacetin moieties" in triacetin not detectable by the normal GC method applied for triacetin determinations (2), a procedure to analyze triacetin in CA filter and in mainstream smoke by (GC)² has been set up.

Extraction procedure for triacetin: according to PME method No. 120 (2).

(GC)² conditions: fused silica capillary column (12 m x 0.2 mm) coated with SP 2100. Oven temperature 140° C (isotherm), injection port temperature 250° C, detector temperature 300° C (FID). Split injection (split ratio 1/60), (GC)² analysis time/sample 3.2 min.

Triacetin and triacetin impurities glycerol-propionate-diacetate (isomers) have been analyzed in the CA filters and in the mainstream smoke of 10 experimental cigarettes prepared according to MLF specification (1).

REFERENCES

- (1) E. Lecoultre, PME Monthly Progress Report, May 1980
- (2) A. Widmer, PME Method No. 120, 1978

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